

PRIORITY 1: Increasing attainment levels to provide the graduates and researchers Europe needs

1. Key policy issues for Member States and higher education institutions

The EU Communication establishes, as a key issue, the increasing of attainment levels as a means to providing the graduates and researchers Europe needs. This issue is analysed in the following four dimensions:

1. Develop clear progression routes from vocational and other education types into higher education. An effective way to achieve this is through national qualification frameworks linked to the European Qualifications Framework and based on learning outcomes, and through clear procedures for recognising learning and experience gained outside formal education and training.
2. Encourage outreach to school students from under-represented groups and to “non-traditional” learners, including adults; provide more transparent information on educational opportunities and outcomes, and tailored guidance to inform study choices and reduce drop-out.
3. Ensure that financial support reaches potential students from lower income backgrounds through a better targeting of resources.
4. Design and implement national strategies to train and re-train enough researchers in line with the Union’s R&D targets.

The EMMA Project was oriented towards the awareness-raising of each of these dimensions through a debate that addressed them in the context of the Compostela Group of Universities, notably through in-depth analysis with stakeholders; this strategy supported the formulation of hands-on advice. We hereby present the main aspects of the debate that took place and we formulate some recommendations.

Both the debate and the recommendations take into consideration the more general framework of the on-going reforms in the EHEA and the underlying objective of contributing to the development of a “knowledge society” as a critical condition to support the welfare of nations and their people. The target of 40% of people aged 30-34 with tertiary level qualifications, by 2020, and the progressive and sustainable strengthening of the research and development system cannot be separated from that objective.

The raising of education and qualification levels of people calls for new developments and the corresponding consolidation of the different paths to HE, for the access to HE of groups that are usually marginalised, and for measures facing the problem of dropping-out.

The education and qualification of people as a means to face current societal changes and to assure one's personal development also demands the enhancement of links between education and science. To achieve this objective, the modes of making European research and development systems more attractive and the ways to consolidate the interactions between teaching and research should be understood as crucial for universities to keep their role in the building of the knowledge society.

2. Main topics raised in the workshop discussions

In the context of the EMMA Project, the discussion on the key issue, “Increasing attainment levels to provide the graduates and researchers Europe needs” was developed after a specification of the framework previously outlined which selected the following topics:

1. Benchmarks for education and training in the contexts of the 2020 Agenda.
2. EU and national qualification frameworks.
3. State, regional and institutional policies to address ET 2020.
4. The prevention of drop-out at secondary and tertiary levels.
5. Current attainment levels: how to move forward.
6. The increasing of attainment levels and its extension to the different social groups.
7. University strategies for reaching school leavers.
8. University strategies for communicating with potential students.
9. Research: investment, strategies for developing partnerships.
10. Strategies for the creation of research jobs.

In the course of the debates, some of these topics became more prominent, and were eventually given more attention.

The examination of the available statistics on attainment and drop-out levels and the inclusion of under-represented groups demonstrated a great variability and diversification across EU-27 countries. The good news is that almost all countries will reach the 40% of a youth cohort taking a post-secondary school degree by 2020, and that several European nations have already reached this target and several countries also hold higher ambitions in their policy goals³.

3 OECD (2013). *Education at a Glance 2013: OECD Indicators*, pp. 25-40.
EC/EACEA/Eurydice (2012). *Key Data on Education in Europe - 2012 Edition*. Education, Audiovisual and Culture Executive Agency, pp. 67-75.

Meanwhile it should be stressed that some of the existing differences still exist among EU countries, some of which are deeply rooted in the history of each educational system. The existence of such diversity should not be ignored when establishing the targets as a means to make them more effective. The educational, social, and economic implications of establishing the same goals for all the countries, ignoring their historical differences, should be taken into consideration.

The attainment levels must also be considered in terms of the different fields of education, as attainment in Science, Technology, Engineering and Mathematics, the so-called STEM subjects is a serious problem for several HE systems. Thus, not only the issue of the general attainment levels must be addressed, but also the attainment in STEM subjects needs to be faced by specific policy measures at European, national, regional and institutional levels.

To increase attainment levels while maintaining quality, focusing on student and learning-centred strategies in times when the traditional university student is changing, and to include under-represented groups, older students and students attending universities part-time, is not an easy equation to solve.

There is an urgent need for evidence-based policy monitoring in what concerns widening participation in HE. In this respect, there are some experiences that should be carefully analysed. This is the case of Bristol University's strategy for increasing attainment level through outreach programmes directed towards under-represented groups (Hoare, 2013; Hoare & Johnston, 2011). This is also the case of the ExpandO Project oriented towards the promotion of "transnational co-operation in the implementation of Lifelong Learning Strategies, more particularly in the field of Widening Access"⁴.

Our current circumstances additionally imply a revision of the progression routes into universities, and notably revisions and more flexibility of academic recognition. Students are also working more while they study higher education, and they are more likely to move to other institutions for complementary credits either abroad or within the same country, also targeting arrangements outside formal education as apprenticeship-like options in the curricula that pose new challenges for academic credit recognition.

In this new context, drop-out should be observed as a multifactor problem, demanding additional evidence from research. New perspectives need to be developed on how HEI should promote structural changes to attend the needs and expectations of socially different groups and in particular the need to support students who risk dropping-out.

4 See <http://expandingopportunities.eu> for more detailed information.

The statistical monitoring and policy-formulation of objectives is taking place at state level, and hence not the remit of individual universities, who, however, have control of impact mechanisms upon student communication and the development of extension programs addressing under-represented groups.

There are many research questions involved in uncovering the relationship between university attainment, tuition fees, student support through grants and loans, the relationships between public and private contribution of these costs and the consequences of different student financing arrangements in terms of access to higher education, particularly concerning students from under-represented groups.

Open system of admission (e.g. Belgium) vs. strict admission clauses (e.g. UK) express various approaches to the attainment levels and drop-out issues by different HE systems. In Flanders, access to tertiary education is open to all those who hold a secondary level degree. This generates a large yearly influx of new students, with a low success rate. On average students acquire 61% of the credits of the courses they register for⁵. Means of heightening the success rate of first year students should be evaluated, searching for the factors influencing the transition between secondary and tertiary education, including restricting access based on secondary degree quality, the use of entrance exams, advice on study choices and strengthening of self-awareness in the choice of tertiary education.

KU Leuven University Rector Professor, Mark Waer, has proposed drawing a distinction between “excellence by inclusion” and “excellence by selection”, which deserves a wide discussion. For Waer, the statistical data of around half the Flemish university students failing in the first year is “often cited as an argument against the system of widespread acceptance of first-year students”, but it needs to be confronted with another statistic showing that five out of six Flemish students obtain a post-secondary degree at a university or university college (Waer, 2012).

With the present development of free online teaching modules in a variety of academic fields on all levels, through videos (such as those on YouTube via the Khan Academy) and through separate teaching platforms developing an increasing number of MOOCs (Massive Open Online Courses), universities should find out how these resources could be utilised as complementary education for those social groups with low university recruitment.

In 2013, researchers at Universitat Rovira i Virgili in Tarragona (Spain) in a survey involving 151 employers in Tarragona, reported that 76% of the respondents said they were satisfied with the graduates employed in their company. When asked if they considered hiring a doctorate degree graduate and if this would add

5 See <http://www.kuleuven.be/cultuur/english/news/official-opening-focuses-on-international-and-regional-networks>

value to their company, 65% of the respondents said they did not believe that hiring a PhD student provides any added value compared with an undergraduate candidate, and only 4% of the polled employers absolutely agreed that an employee with a PhD degree should be paid a higher salary (see Figueras, 2013).

These attitudes towards doctorate training should be taken into consideration and again it demands the gathering of more data on doctorate training and work outside academia, and notably how to train doctorate students better in skills demanded by the workforce as a remit under the Modernisation Agenda and the training and re-training of researchers. This is the kind of project the Compostela Group of Universities seems to be in a very good position to perform.

Lieven Danneels, of Televic, a company that develops, manufactures and installs top end high-tech communication systems for specific niche markets in Europe, India and China, reported at the first EMMA conference that in 1998 there was no PhD-holder employed by Televic. In 2009 there were five and in 2013 the number increased to seven PhD-holders employed, the company having looked for more.

Danneels, also President of the Chamber of Commerce West Flanders (one of the eight Voka - Kamers) and member of the Board of KU Leuven, said that the labour market evaluation is increasingly demanding “additionality and complementarity” based on “talent economy”, “people that can deal with change”, “creative, explorative minds”, “managing complexity” and called for a “trilateral network and hybrid organisation between the State, Academia and Industry”. Danneels also called for “a quality index in the alignment of degrees” and that the present “high intake, many failures” admission at Flemish universities should be re-examined in order to obtain a 35% attainment level by 2020”.

The Council for Doctoral Education of EUA (European Universities Association); the Doctoral Studies Community of LERU (League of European Research Universities); the Doctoral Studies and Research Task-Force of CG (Coimbra Group); the PhD Officers Group & UNICA PhD Master Class of UNICA (Network of Universities from Capitals of Europe) illustrate how important doctorate training is for university network collaboration and coordination. It is now timely to extend the debate on PhD objectives, models, and activities, as well as on the strategies to widening the participation in doctoral studies.

3. Recommendations

3.1 Progression routes/national qualification frameworks

1. The intended greater differentiation of the student admitted to first year university courses in Europe, also with attainment of older student groups with either work experience or some higher education to be recognised

as a part of the degree requirements, and of groups that traditionally have not been recruited to university studies, call for a revision of the national qualification frameworks allowing for this diversification.

2. Focus should be placed on the need for excellence by inclusion not excellence by selection of youth cohorts with regard to higher education, postponing such selection until after the bachelor level, to account for the high variability in maturity and social malleability of 18-year-olds.
3. Improve clear progression routes into higher education: European students often have a hiatus between finishing secondary education and starting tertiary training; other students, for several reasons, do not proceed to tertiary education, even if they want to do so. More research into factors provoking such hiatus or leave of formal education should be undertaken, notably on how and why this could change.

3.2 Outreach to under-represented groups/stemming from drop-out rates

4. Drop-out rates and tertiary degree completion rates vary strongly across European countries. For instance, in Denmark the completion age for a Master degree is 28 years old. Universities are recommended to investigate the relationship between drop-out rates and completion age, in order to produce more evidence based on information on which interventions might reduce drop-out rates or improve the delay-time-to-graduation.
5. The social dimension of the Bologna Process and the ERASMUS Programme are of paramount importance in terms of widening participation in higher education and should be further strengthened.
6. Further assessment studies on admission policies to widen participation should be undertaken to monitor the effect such measures have had.
7. Clarification of “cause and effect” factors in assessment studies of widening participation measures should be further re-worked, in order to establish evidence-based policies.
8. Countries and universities demanding tuition fees for students should develop a grant system, with particular allocation for underprivileged groups.
9. Universities should follow the MOOCs development in particular, with regard to how to use such courses as motivational and complementary training for students from social groups with low university enrolment.
10. Because widening participation will imply new organisational challenges, it should be matched with increasing financing of HEIs. As it is acknowledged in the Communication from the Commission on the Modernisation

Agenda investment in HE in Europe is too low if compared to the US or to Japan.

3.3 Support mechanisms for under-represented groups

11. The Bologna process has worked out a catalogue of good practice in social dimension implementation in HE⁶. The measures occur a) before HE entry, b) at HE entry c) during study progress and aim at improving the equity dimension at the HE system level. The EMMA Project proposes updating and extending this good practice catalogue to more countries' practices.
12. On this basis we suggest measures to widen access for disadvantaged students and those from lower socio-economic backgrounds in order to encourage social mobility. We also suggest measures for delivering fair access, in the areas of attainment, informed subject choice, building aspiration and addressing postgraduate access.

3.4 Train and re-train researchers

13. PhD programmes more directed towards the needs of the industry should be actively enhanced by universities and the private sector.
14. Specific devices to exchange information and opportunities for career paths for doctorate candidates outside academia should be developed.
15. Specific actions should be promoted in order to tackle stereotyping by students reaching post-graduate education vis à vis STEM-academic fields.
16. Student centred teaching involving students in research processes at an early stage of their studies should be seen as a means of assuring greater recruitment to research upon graduation.

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6 See <http://www.ehea.info/article-details.aspx?ArticleId=244>